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Physical Distance
Constraint Determination



Enrichment of Intra-molecular
Cross-linked Proteins



Proteolysis



Peptide Analysis and Identification



Identification and Interpretation of
Cross-linked Sites on Proteins



Protein Modeling

FIGURE 1

09580380-052600

00000000000000000000000000000000

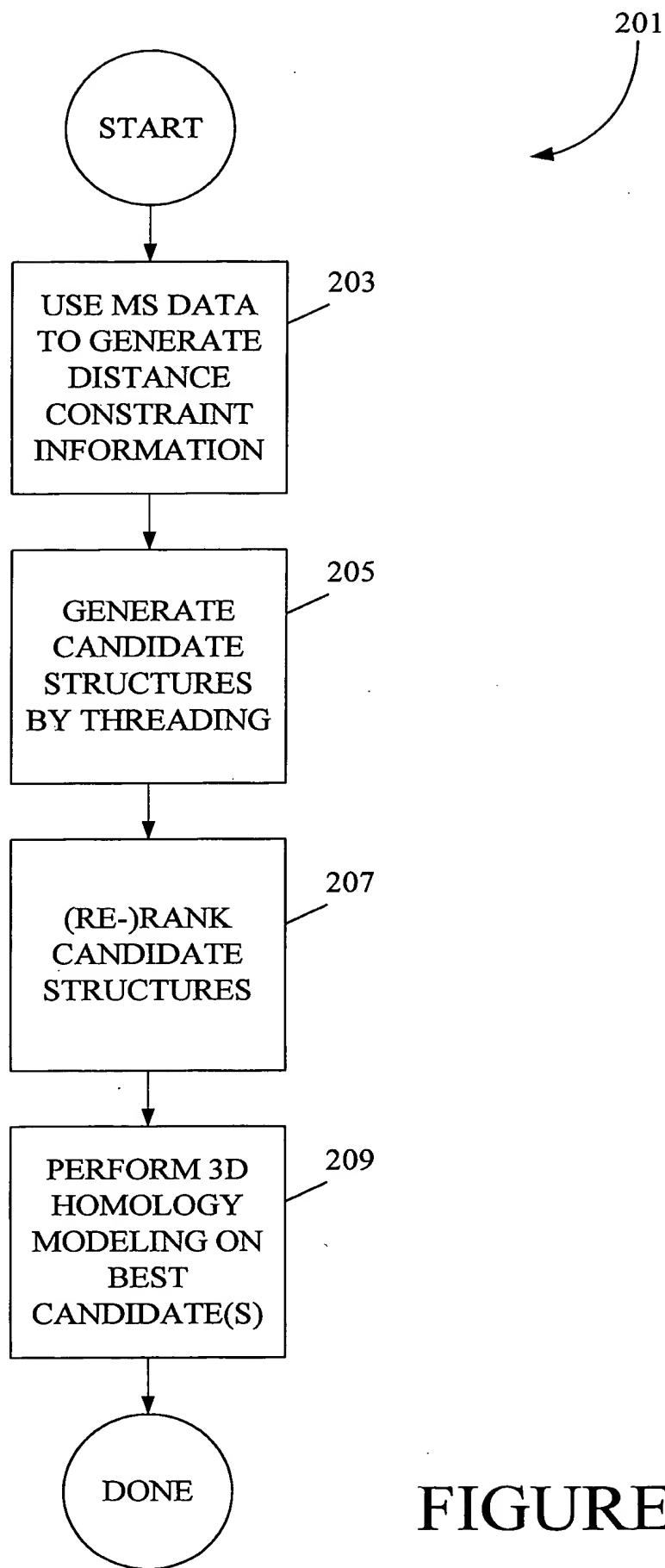


FIGURE 2

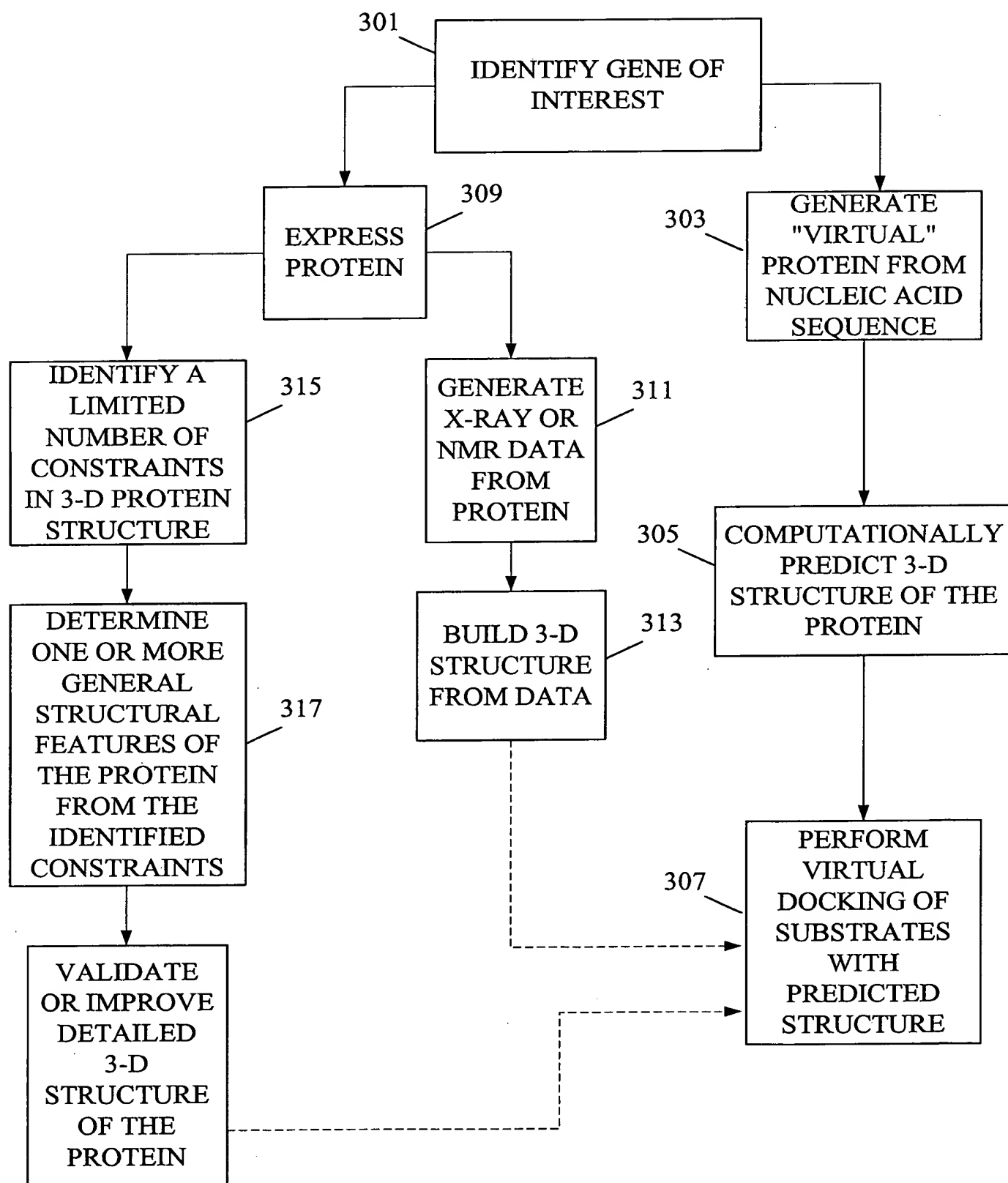


FIGURE 3

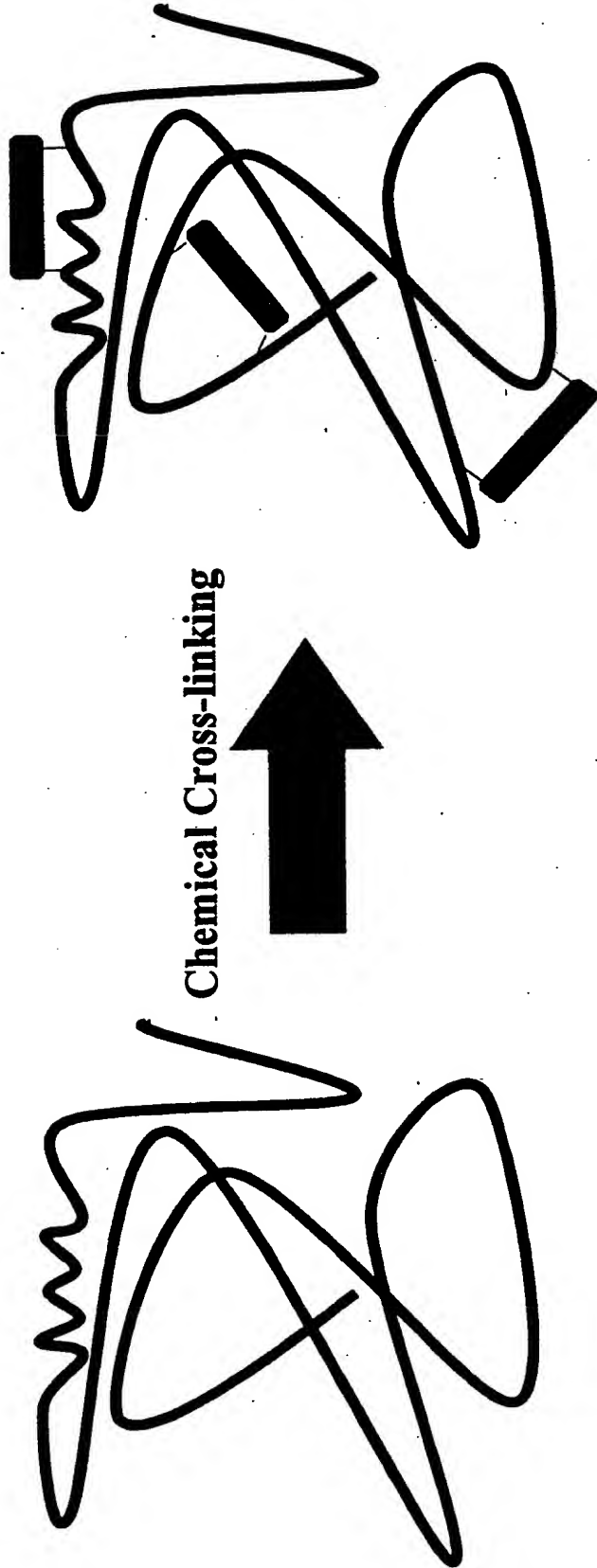
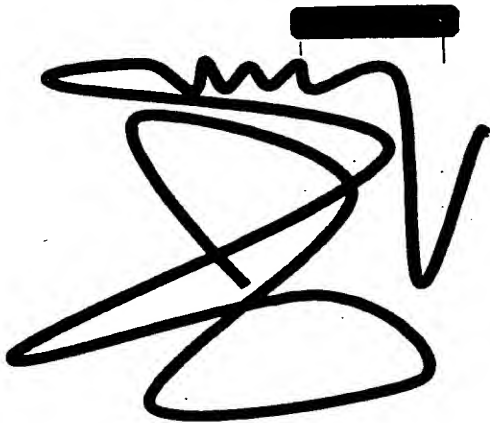


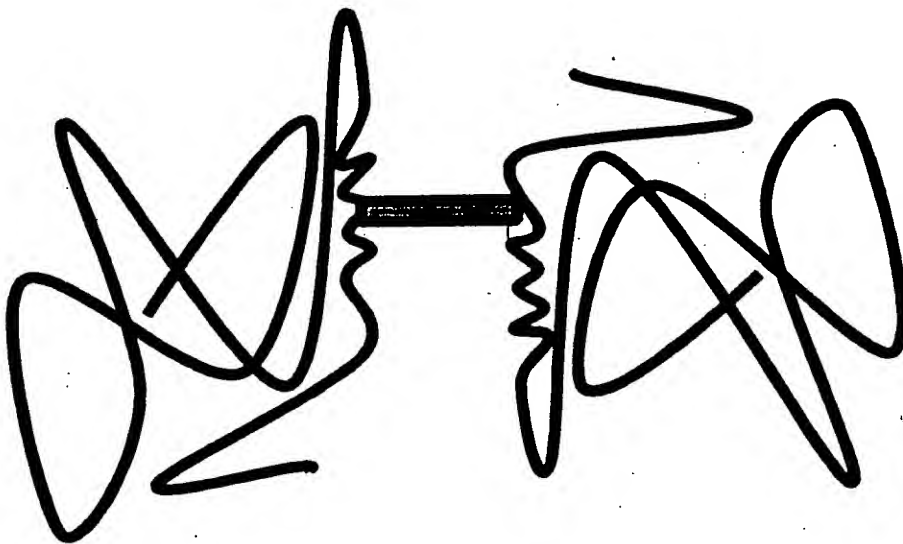
FIGURE 4



**Intramolecular
Crosslink**



**Single-site (Dead-
end) Crosslink**



**Intermolecular
Crosslink**

FIGURE 5

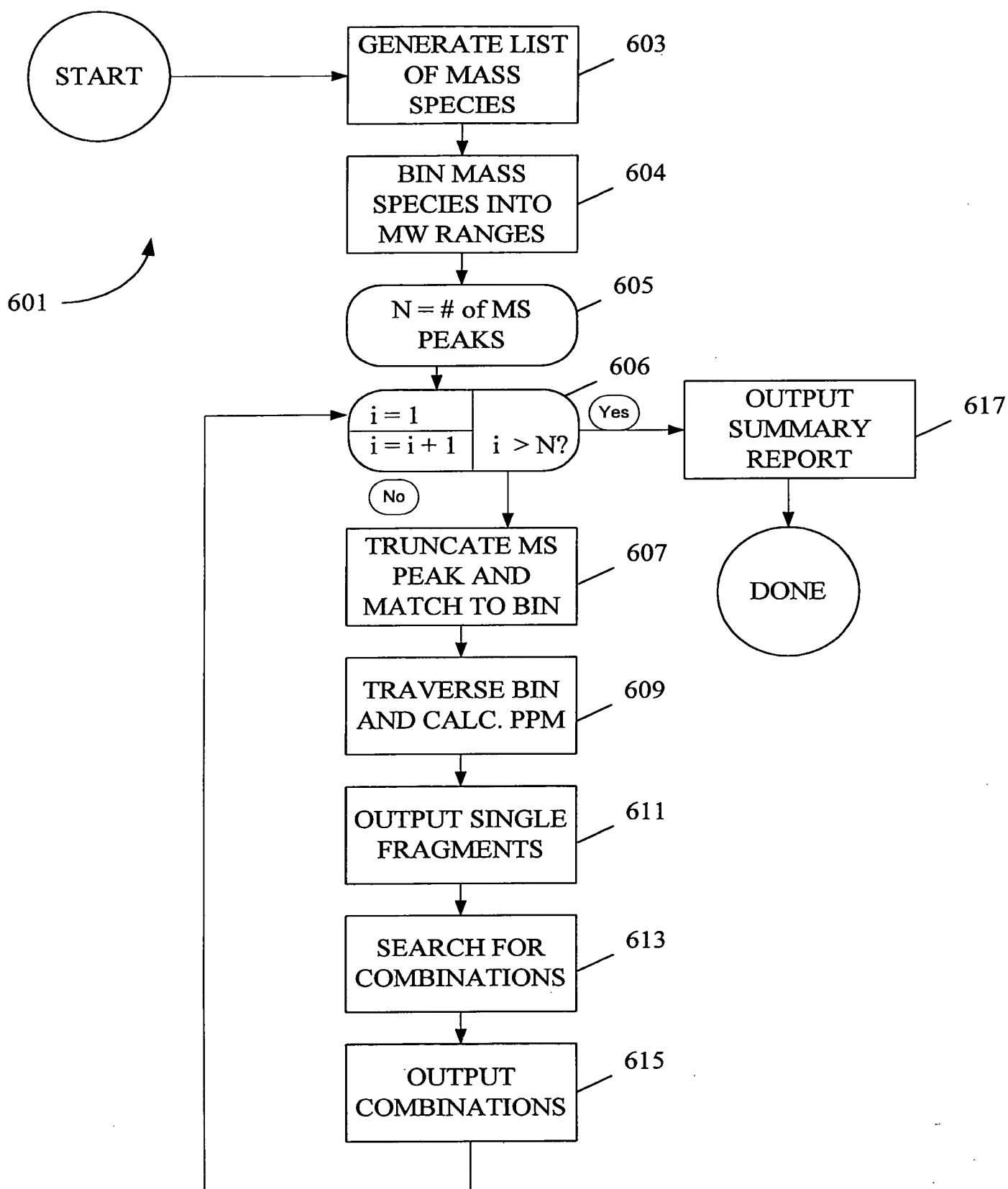


FIGURE 6

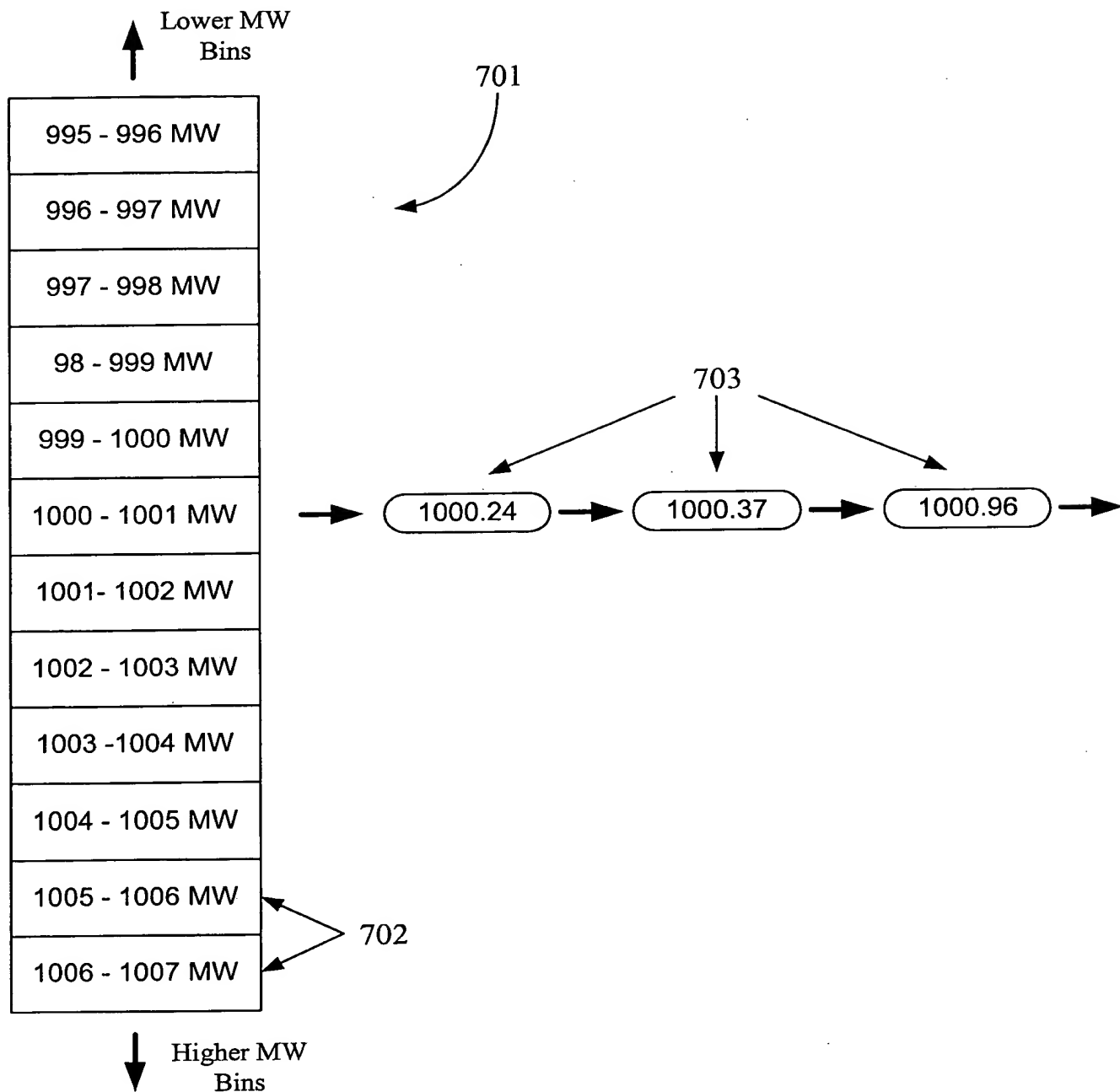


FIGURE 7

SUMMARY REPORT

INTRAfragment ASSIGNMENTS

Mass	Assignment	# Peaks	PPM Error	Crosslink
1000.24	1-10	3	4.3	5-8
1000.37	38-50	2	3.7	40-44
1000.96	57-66	2	4.4	55-61

INTERfragment ASSIGNMENTS

Mass	Assignment	# Peaks	PPM Error	Crosslink
1000.02	12-16, 68-76	3	1.9	13-68
1000.87	20-27, 81-83	3	1.7	40-44
1000.89	67-72, 95-100	2	2.6	55-61

FIGURE 8

009250"08282560

009250" 08E08560

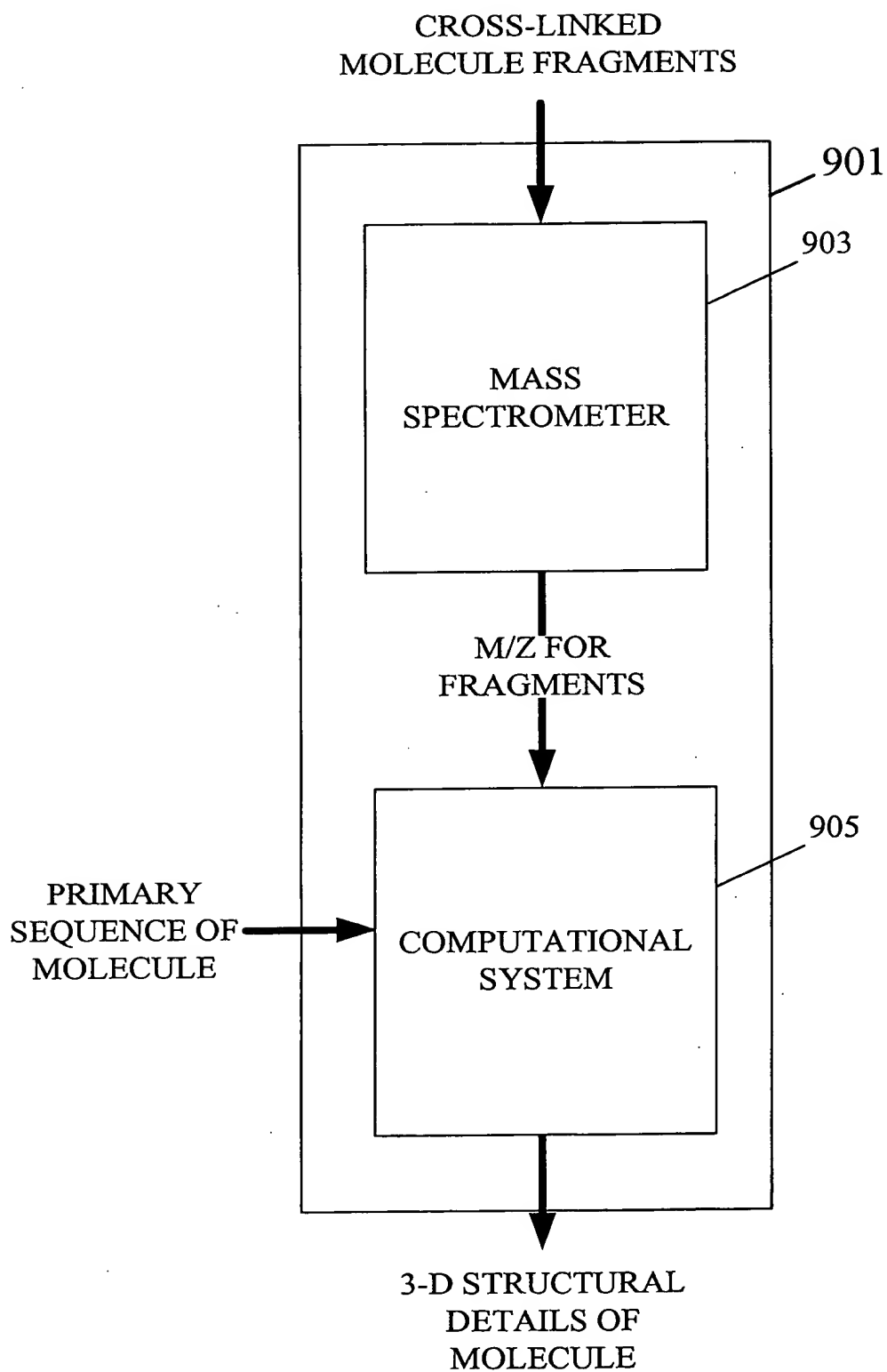


FIGURE 9

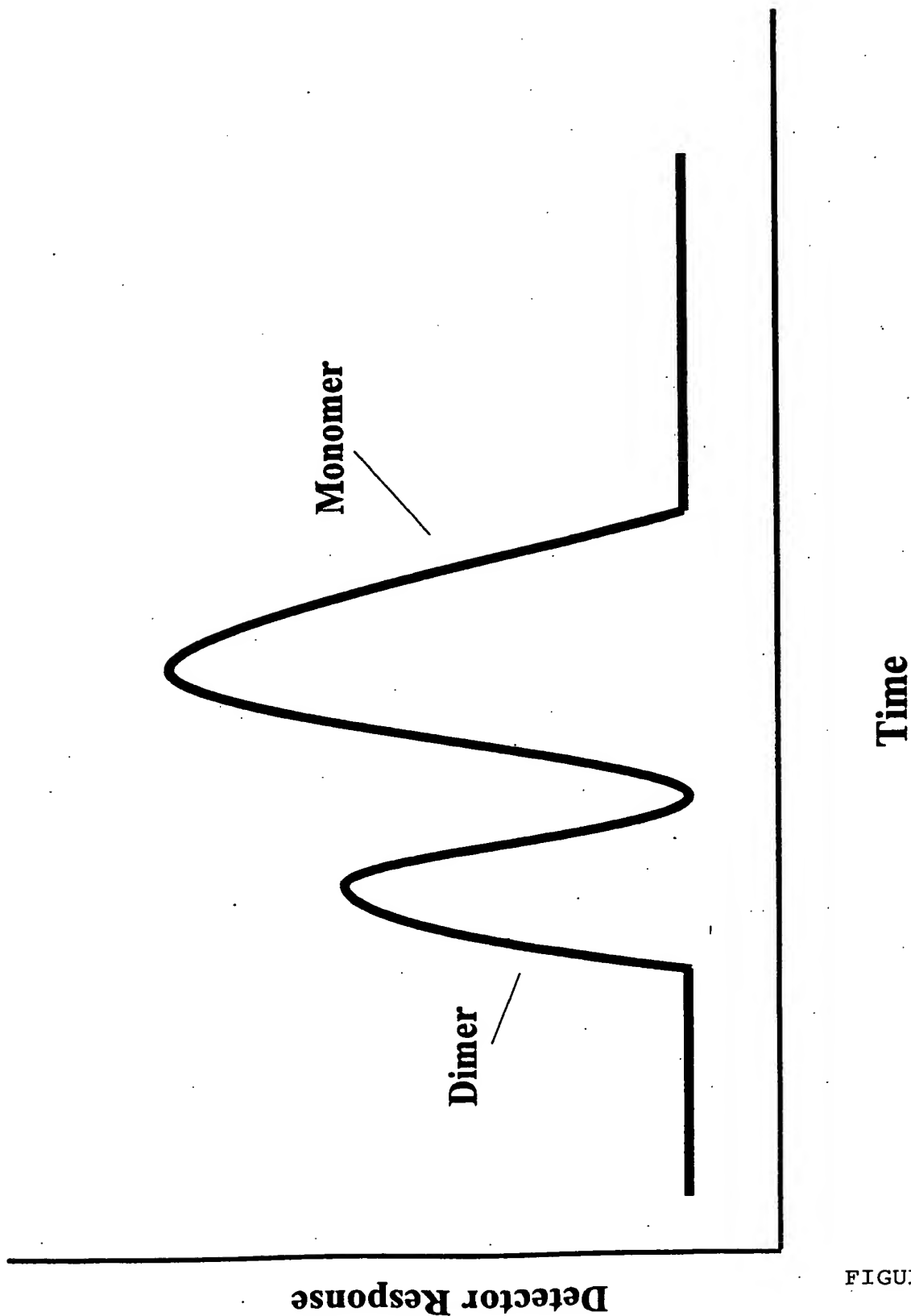
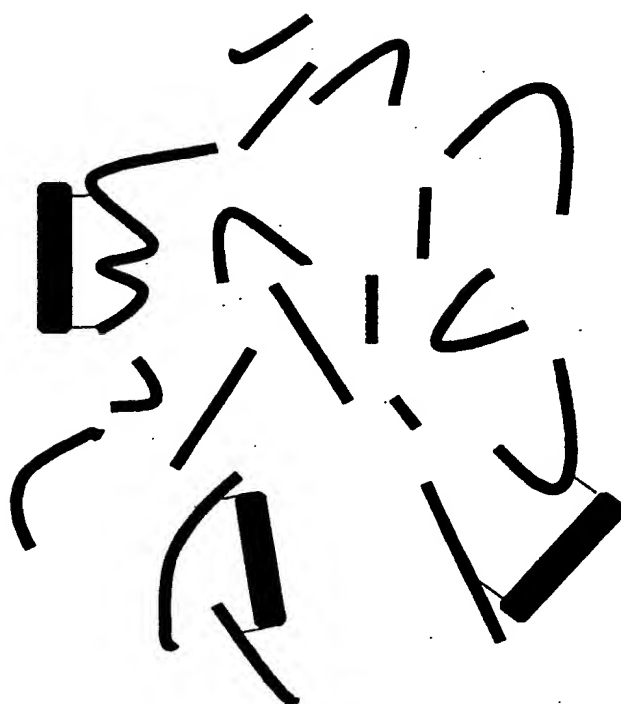


FIGURE 10

009250" 08E08560



Proteolysis

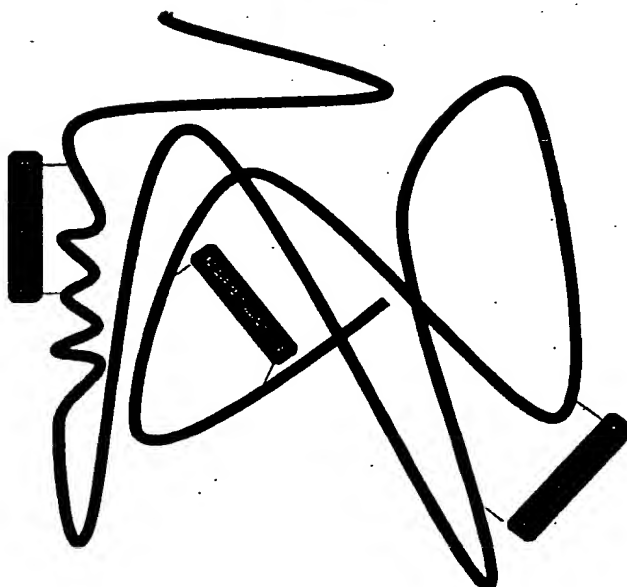
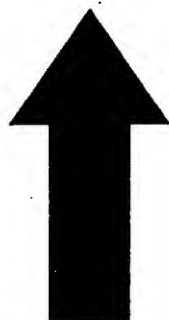


FIGURE 11

Mass Measurement

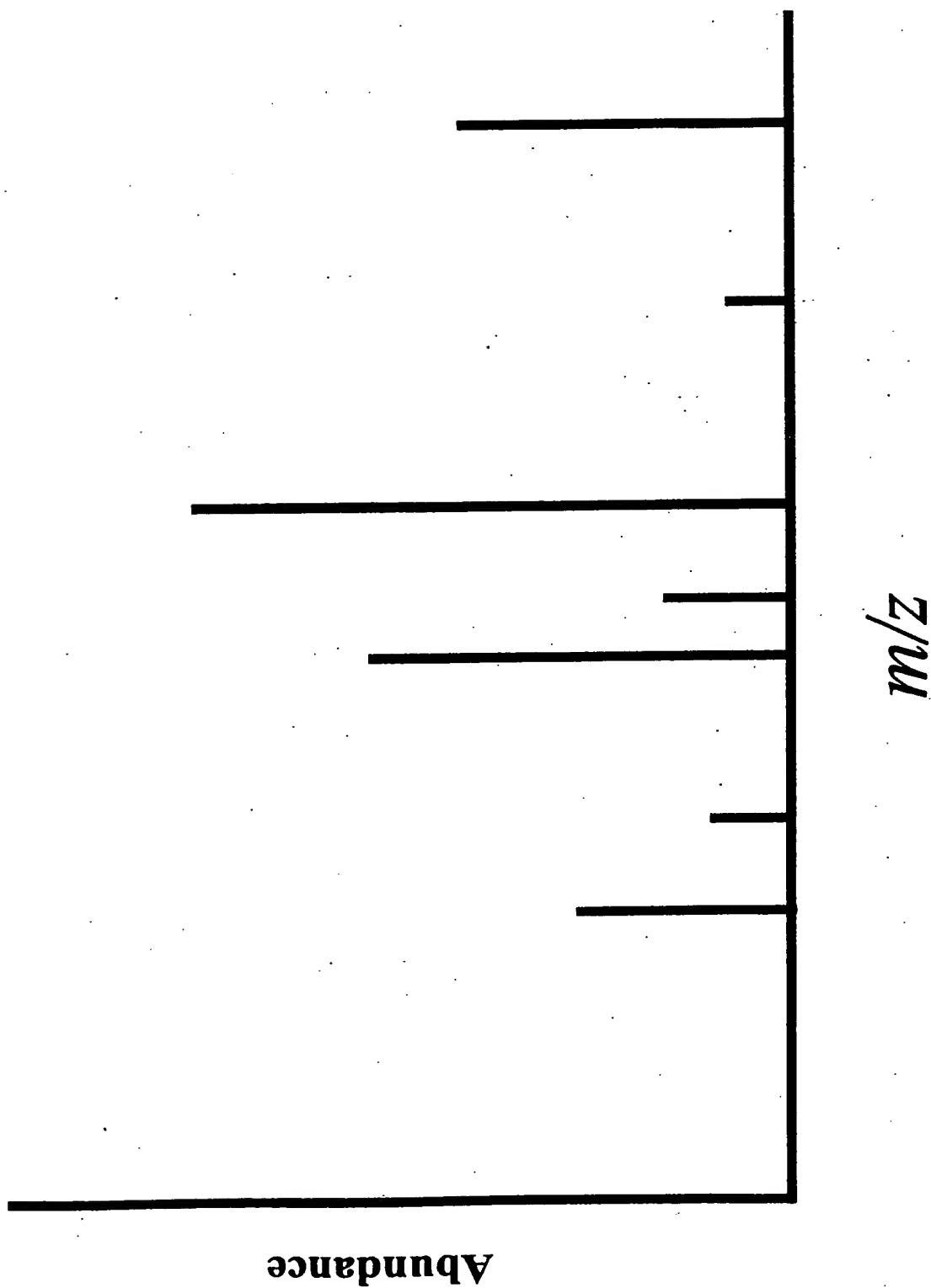


FIGURE 12

0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

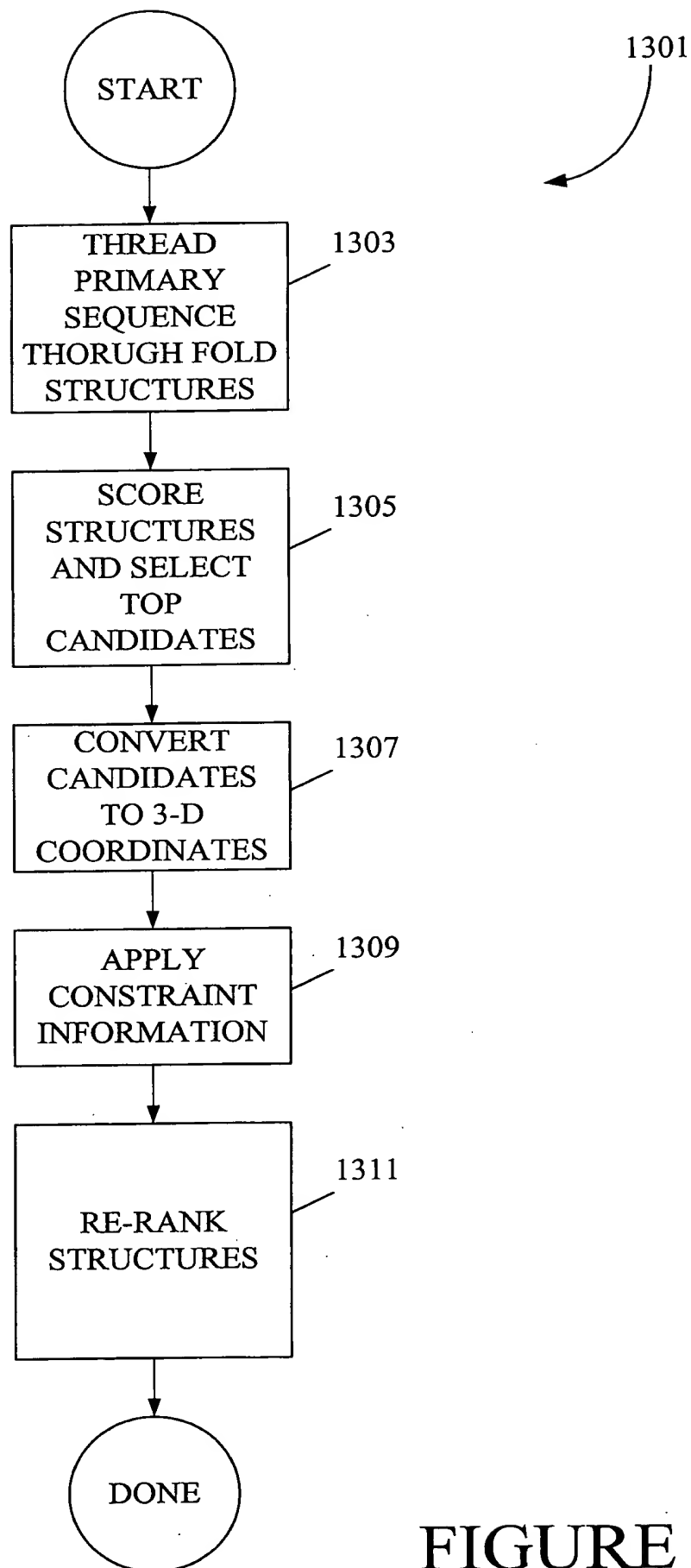


FIGURE 13

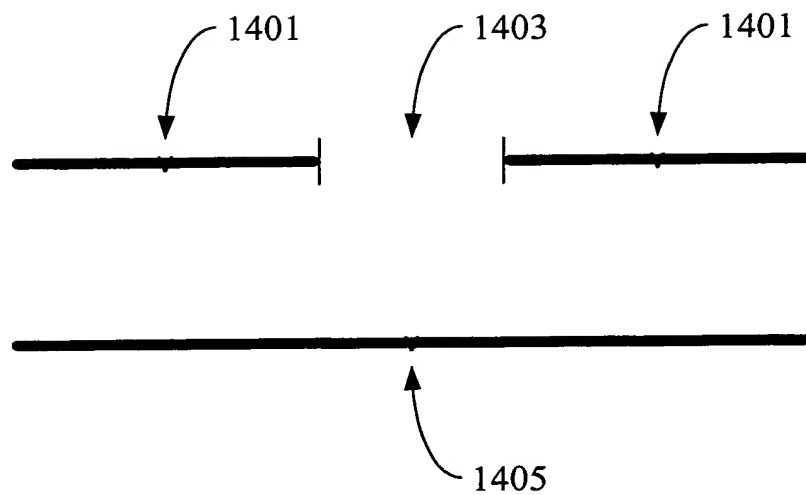


FIGURE 14A

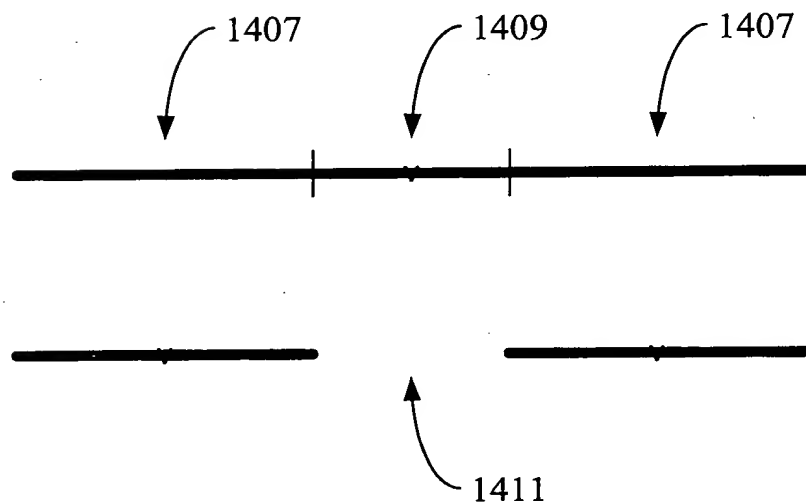


FIGURE 14B

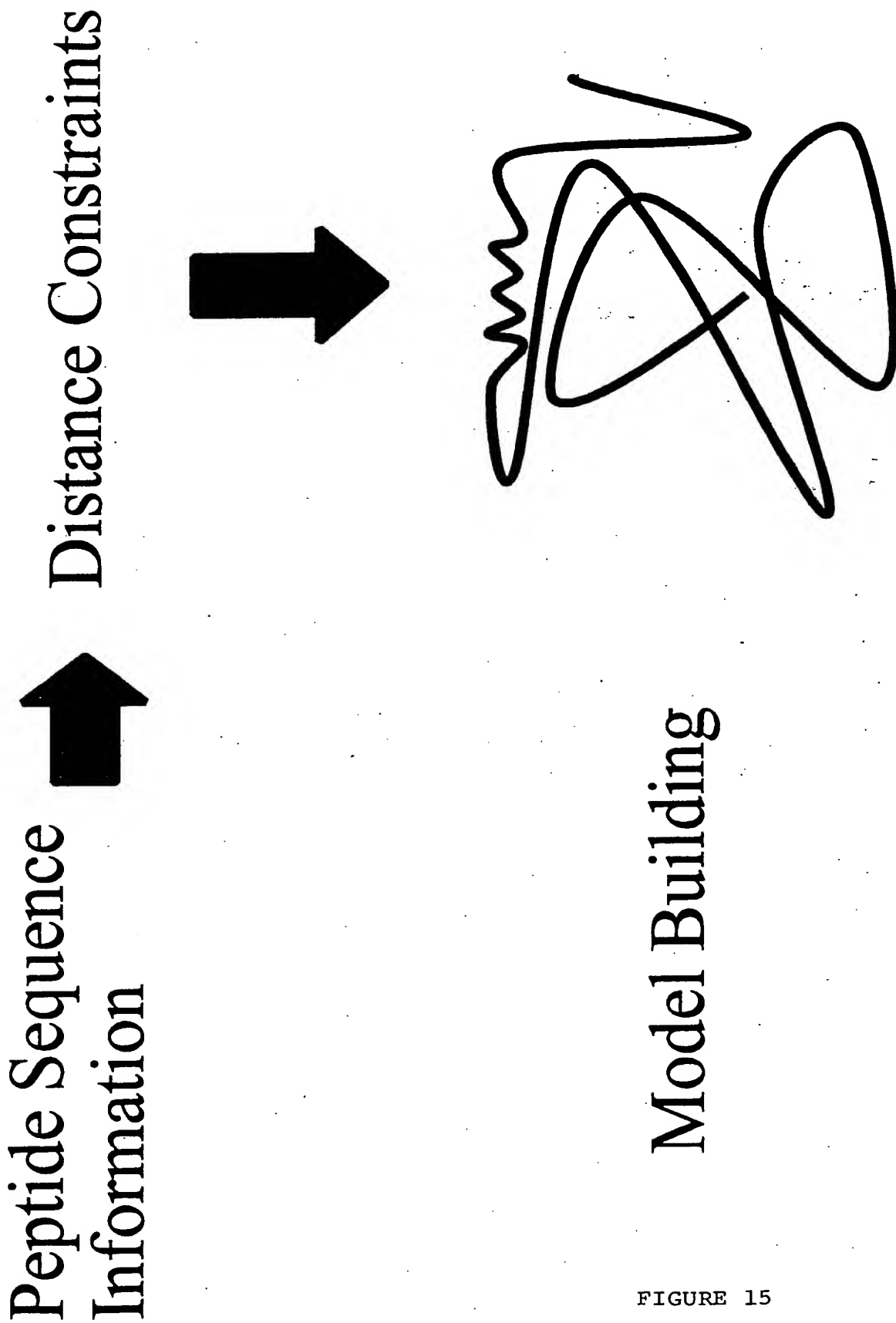


FIGURE 15

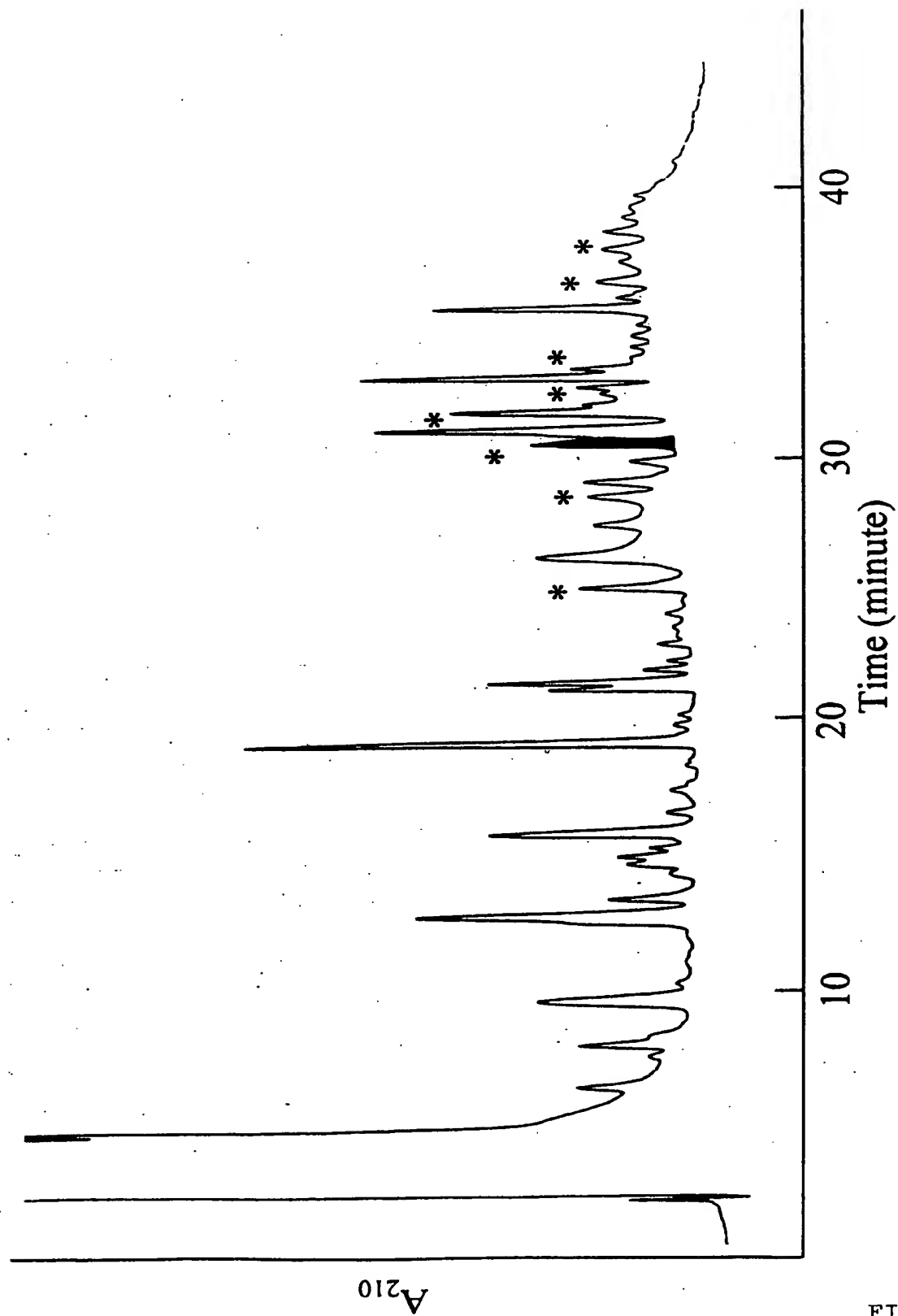


FIGURE 16

009250" 08E08360

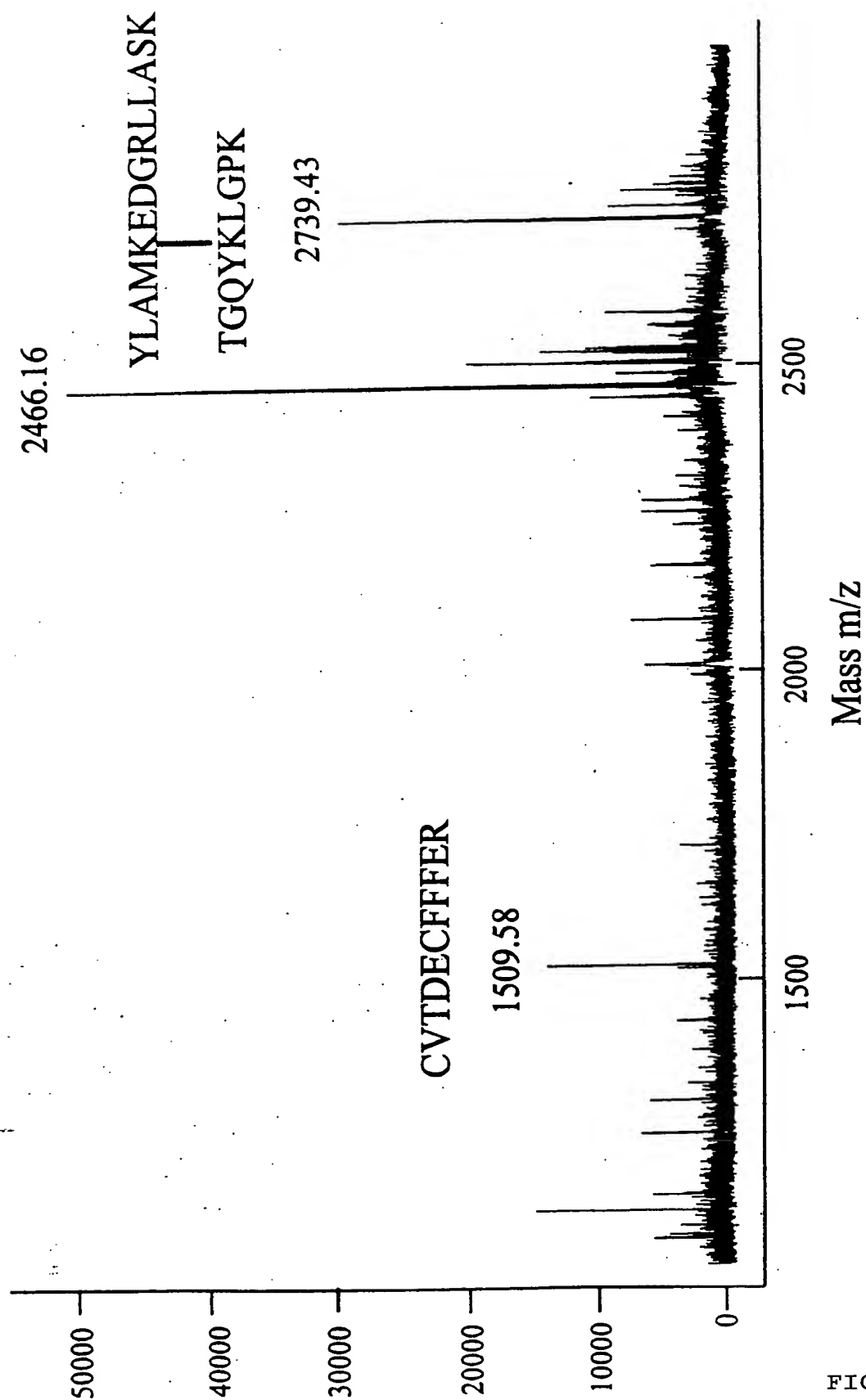


FIGURE 17

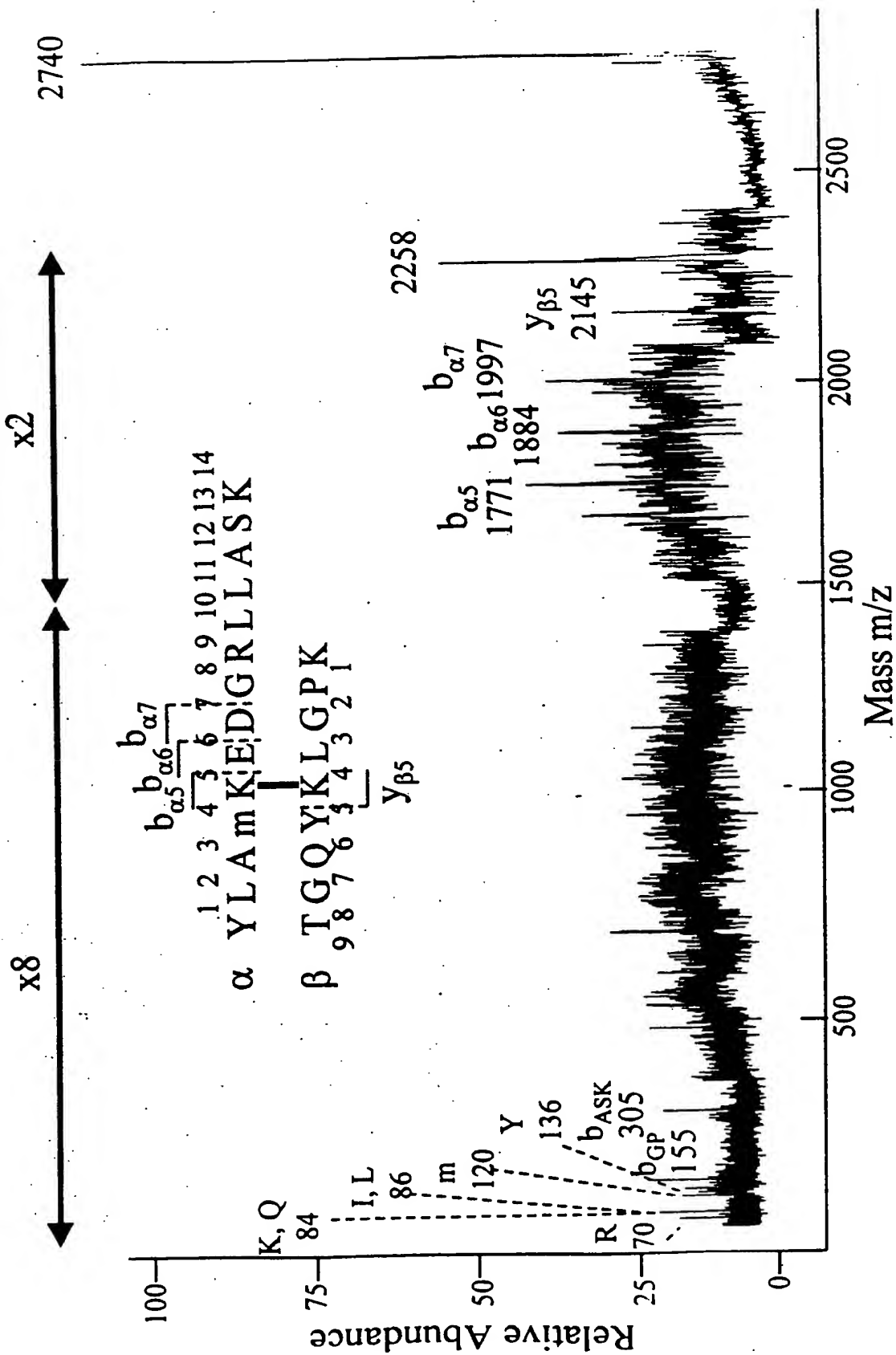


FIGURE 18

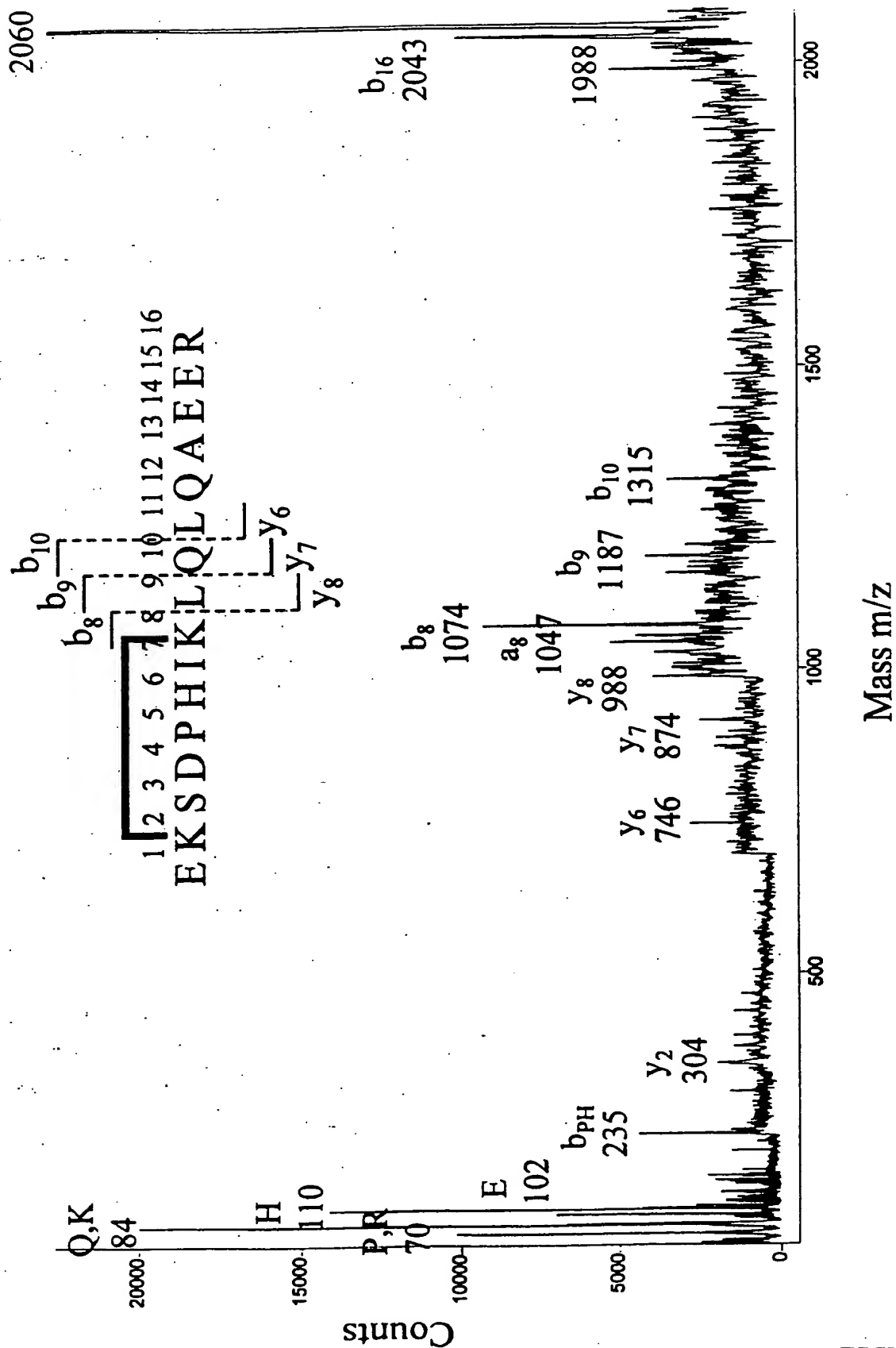


FIGURE 19A

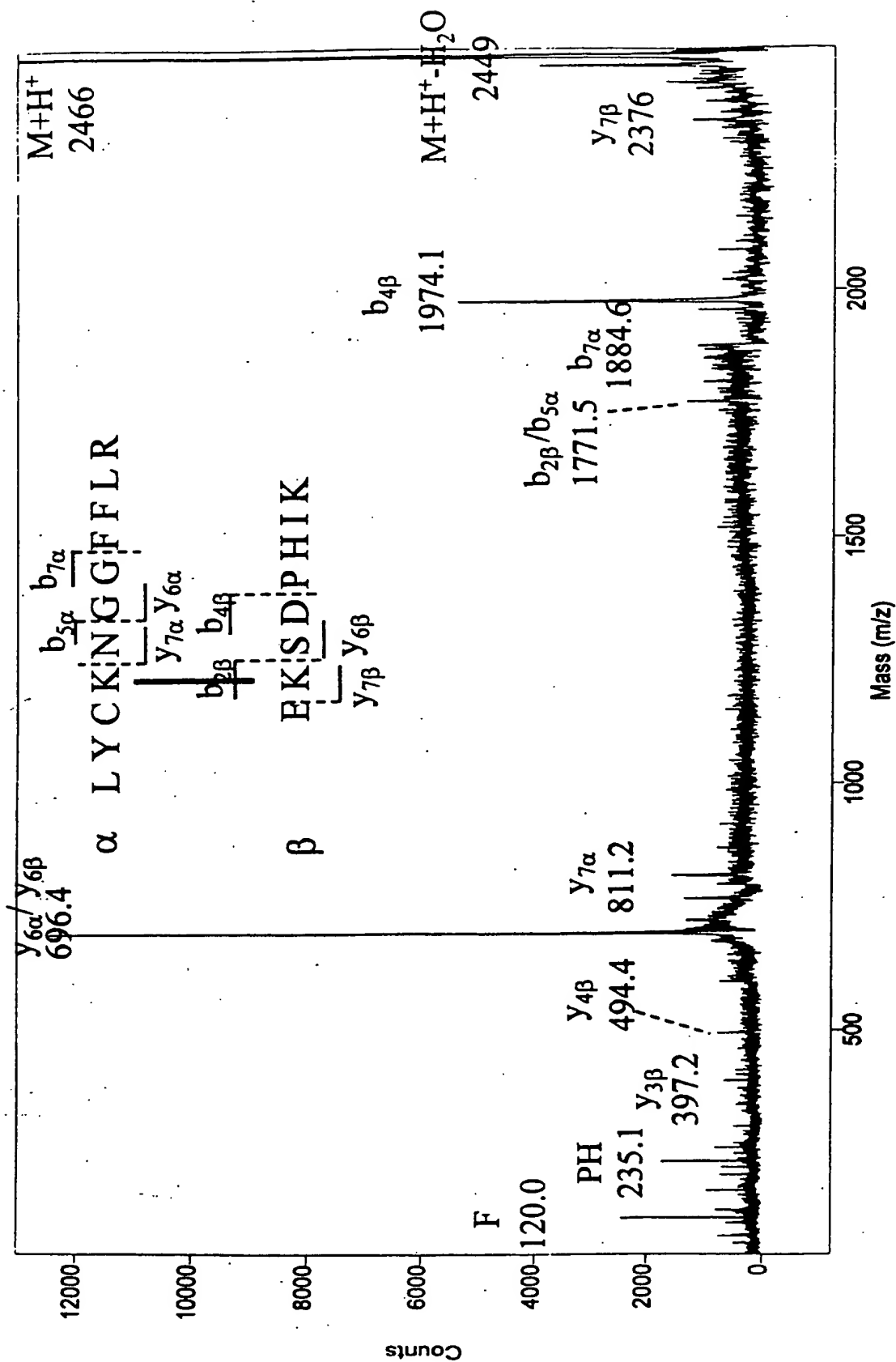


FIGURE 19B

A) IL-1 β 1 -----APVRSLNCTLRDSQQKSLVMSGPYELKALHLQ---GQDMEQQVVFMSFVQGE
 FGF2 1 PALPEDGGSGAFPFGHKDPK-RLYCKNGGFFLRHPDGRVDGVREKSDPHIK---LQLQ

IL-1 β 61 ESNDKIPVALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFRVFNKIEINNKL
 FGF2 61 AEERGVSIGVCANRYL---AMKEDGRLLASK-----CVTDECFFERLESNNYN

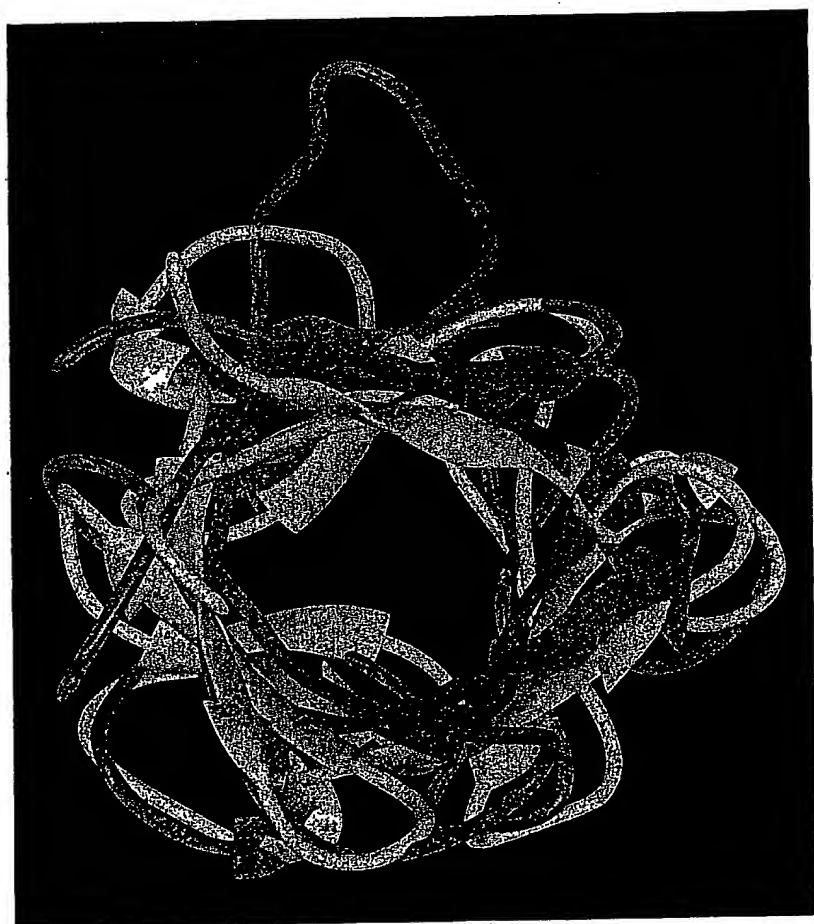
IL-1 β 121 EFESAQFPNWIYSTQAENMPVFLGGTKGGQDITDFTMQF--VSS
 FGF2 121 TYRSRKYSSWYVALKRTGY---KLGPKTGPGQKAILFLPMSAKS

B) IL-1 β 1 APVRSLNCTLRDS-QQKSLVMSGPYELKALHLQGQDMEQQ- VVFSMSFVQGEESNDKIPV
 FGF2 1 -----PKRLYCKNGGFFLRHPDGRVDGVRE----KSDPHIKLQQAEE----- RGVV

IL-1 β 61 ALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFRVFNKIEI-NNKLEFESAQF
 FGF2 61 SIKGVCANRYLAMKE---DGRLLASKC-----VTDECFFERLESNNYNTYRSRKY

IL-1 β 121 PNWYISTSQAENMPVFLG--GTKGGQDITDFTMQFVSS
 FGF2 121 SSWYVALKRT--GQYKLGPKTGPG-QKAILFLPMSAKS

FIGURE 20



- FGF-2 crystal structure (4fgf)
- Homology model based on IL-1β

FIGURE 21

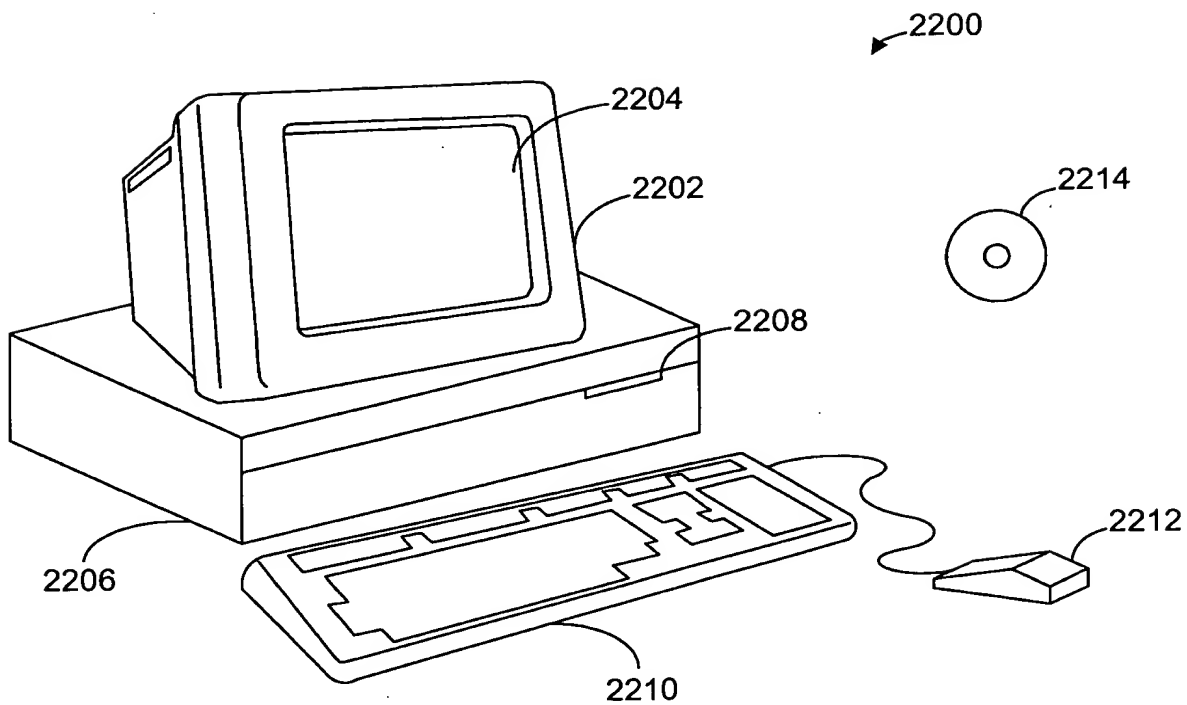


Figure 22A

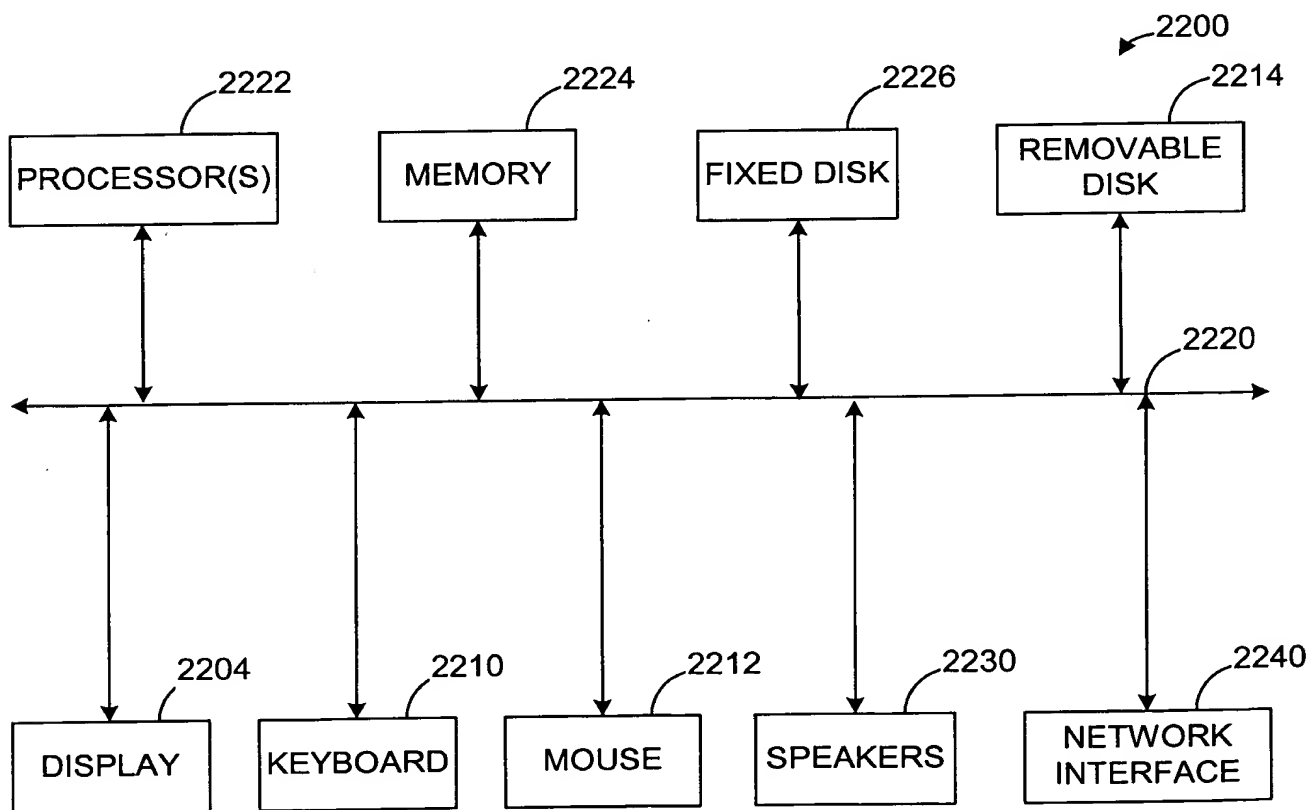


Figure 22B